

REMARKS

Claims 2 and 55-61 were previously canceled. Claims 1 and 3-54 remain pending in the application.

Claims 1, 3-10, 15 and 17-54 over Dunlop, Schuster and Fujimori

In the Office Action, claims 1, 3-10, 15 and 17-54 are rejected under 35 U.S.C. §103(a) as allegedly being obvious over U.S. Patent No. 6,721,872 to Dunlop et al. (“Dunlop”) in view of U.S. Patent No. 6,785,261 to Schuster et al. (“Schuster”), and further in view of U.S. Patent No. 5,825,752 to Fujimori et al. (“Fujimori”). The Applicants respectfully traverse the rejection.

Claims 1, 3-10, 15 and 17-54 recite, inter alia, a protocol gateway that **adds** Transmission Control Protocol (TCP) functionality to multiple segments communicated with a **connectionless protocol** through a layer of a **peer protocol** working in coordination with the connectionless protocol.

The Examiner alleges that Fujimori teaches the limitations added in the Amendment filed on May 20, 2010. (see Office Action, page 17) As discussed below, the Examiner relies on Fujimori to allegedly teach a connectionless protocol that has TCP functionality. (see Office Action, page 3) However, Applicants’ claims require a protocol gateway that **adds** TCP functionality to multiple segments communicated with a connectionless protocol. A network relying on a connectionless protocol that has TCP functionality is not a protocol gateway that **adds** Transmission Control Protocol (TCP) functionality to multiple segments communicated with a **connectionless protocol** through a layer of a **peer protocol** working in coordination with the connectionless protocol, as required by claims 1, 3-10, 15 and 17-54 and as added to independent claims 1 and 48 in the Amendment filed on May 20, 2010.

The Examiner relies on Dunlop to allegedly teach “a client device”, “a server”, “a protocol gateway adaptively arranged between at least two of a plurality of communication networks each communicating said messages between said client device and said server with a plurality of differing wireless network protocols, said protocol gateway communicated with an underlying wireless network protocol”, and “a reconfigurable network interface architecture

including a device to support/encapsulate multiple network operating protocols, wireless LAN, and an OSI protocol stack". (see Office Action, pages 2 and 3)

Thus, the Examiner acknowledges that Dunlop fails to teach a protocol gateway that **adds** Transmission Control Protocol (TCP) functionality to multiple segments communicated with a **connectionless protocol** through a layer of a **peer protocol** working in coordination with the connectionless protocol, as required by claims 1, 3-10, 15 and 17-54.

The Examiner relies on Schuster to allegedly teach "a messages divided into data packets and those packets including a packet/protocol header that encapsulates them". (see Office Action, page 3)

Thus, the Examiner acknowledges that Schuster fails to teach a protocol gateway that **adds** Transmission Control Protocol (TCP) functionality to multiple segments communicated with a **connectionless protocol** through a layer of a **peer protocol** working in coordination with the connectionless protocol, as required by claims 1, 3-10, 15 and 17-54.

Moreover, Schuster teaches:

In a packet switched network, a message to be sent is divided into blocks, or data packets, of fixed or variable length. The packets are then sent individually over the network through multiple locations and then reassembled at a final location before being delivered to a user at a receiving end. To ensure proper transmission and re-assembly of the blocks of data at the receiving end, various control data, such as sequence and verification information, is typically appended to each packet in the form of a packet header. At the receiving end, the packets are then reassembled and transmitted to an end user in a format compatible with the user's equipment.

To facilitate packet-based communication over interconnected networks that may include computers of various architectures and operating systems, the networks and computers typically operate according to an agreed set of packet switching protocols. A variety of such protocols are available, and these protocols range in degree of efficiency and reliability. Those skilled in the art are familiar, for instance, with the Transport Control Protocol/Internet Protocol (TCP/IP) suite of protocols, which is used to manage transmission of packets throughout the Internet and other packet switched networks.

According to UDP, the transport layer takes a data stream to be transmitted and breaks it up into independent connectionless segments or "datagrams." UDP adds to each of these packages an 8 byte header, which includes overhead information such as a source port number, a

destination port number and a length and a checksum designed to allow the receiving end to properly reassemble the datagrams into the original message. The transport layer then "passes" each of these packages to the IP layer.

The IP layer in turn adds another header to each package, providing additional overhead information, such as a source IP address and a destination IP address. The IP layer then transmits the resulting packages through the Internet, possibly fragmenting each package into pieces as it goes. As the pieces of the package finally reach the destination machine, they are reassembled by the IP layer and passed to the transport layer. (see col. 1, line 63 - col. 2, line 7 and col. 2, lines 49-65)

Schuster teaches the connection protocol TCP and separately the connectionless protocol UDP. UDP is a connectionless protocol that minimizes packet overhead at the expense of lacking support for, e.g., acknowledgement and delivery guarantee, that are provided for with TCP. In certain situations, however, TCP functionality is desired for a connectionless protocol. The Examiner's cited references lack a teaching or suggest to add TCP functionality to a connectionless protocol, much less through a layer of a peer protocol working in coordination with a connectionless protocol, as required by all pending claims 1, 3-10, 15 and 17-54.

The Examiner relies on Fujimori to allegedly teach "a peer to peer transmission method that is connectionless but has an ACK/retry function included". (see Office Action, page 3)

Thus, the Examiner acknowledges that Fujimori fails to teach a protocol gateway that adds Transmission Control Protocol (TCP) functionality to multiple segments communicated with a connectionless protocol through a layer of a peer protocol working in coordination with the connectionless protocol, as required by claims 1, 3-10, 15 and 17-54.

The Examiner acknowledges that at best Dunlop, Schuster, and Fujimori disclose, teach or suggest "a protocol gateway adaptively arranged between at least two of a plurality of communication networks each communicating said messages between said client device and said server with a plurality of differing wireless network protocols, said protocol gateway communicated with an underlying wireless network protocol [and,] a

reconfigurable network interface architecture including a device to support/encapsulate multiple network operating protocols, wireless LAN, and an OSI protocol stack” (Dunlop), “messages divided into data packets and those packets including a packet/protocol header that encapsulates them” (Schuster), and “a peer to peer transmission method that is connectionless but has an ACK/retry function included” (Fujimori).

Dunlop, Schuster, and Fujimori, either alone or in combination, fail to disclose, teach or suggest a protocol gateway that **adds** Transmission Control Protocol (TCP) functionality to multiple segments communicated with a **connectionless protocol** through a layer of a **peer protocol** working in coordination with the connectionless protocol, as required by claims 1, 3-10, 15 and 17-54.

Accordingly, for at least all the above reasons, claims 1, 3-10, 15 and 17-54 are patentable over the prior art of record. It is therefore respectfully requested that the rejection be withdrawn.

Claims 11-14 and 16 over Gleeson in view of Dunlop, Schuster, and Meyer

In the Office Action, claims 11-14 and 16 are rejected under 35 U.S.C. §103(a) as allegedly being obvious over Gleeson in view of Dunlop and Schuster, and in further view of U.S. Patent No. 6,778,099 to Meyer et al. (“Meyer”). The Applicants respectfully traverse the rejection.

Claims 11-14 and 16 are dependent on claim 1, and are allowable for at least the same reasons as claim 1.

Claims 11-14 and 16 recite, inter alia, a protocol gateway that **adds** Transmission Control Protocol (TCP) functionality to multiple segments communicated with a **connectionless protocol** through a layer of a **peer protocol** working in coordination with the connectionless protocol. As discussed above, Dunlop, Schuster, and Fujimori, either alone or in combination, fail to disclose, teach or suggest such features.

The Examiner relies on Meyer to allegedly make up for the deficiencies in Gleeson, Schuster and Dunlop to arrive at the claimed features. In particular, the Examiner relies on Meyer to allegedly disclose a data link layer

and a physical layer that are together adapted to comply with an RIM protocol, an ARDIS protocol, a GPRS protocol, and a GSM protocol. (see Office Action, pages 14, 15 and 16)

A thorough reading of Meyer reveals that he fails to disclose a protocol gateway, much less a protocol gateway that adds Transmission Control Protocol (TCP) functionality to multiple segments communicated with a connectionless protocol through a layer of a peer protocol working in coordination with the connectionless protocol, as recited by claims 11-14 and 16.

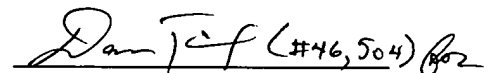
Dunlop, Schuster, Fujimori, and Meyer, either alone or in combination, fail to disclose, teach or suggest a protocol gateway that adds Transmission Control Protocol (TCP) functionality to multiple segments communicated with a connectionless protocol through a layer of a peer protocol working in coordination with the connectionless protocol, as recited by claims 11-14 and 16.

Accordingly, for at least all the above reasons, claims 11-14 and 16 are patentable over the prior art of record. It is therefore respectfully requested that the rejection be withdrawn.

Conclusion

All objections and rejections having been addressed, it is respectfully submitted that the subject application is in condition for allowance and a Notice to that effect is earnestly solicited.

Respectfully submitted,


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